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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09-786,424	03-02-2001	Michael Connolly	A20-019	1676

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EXAMINER

STAFIRA, MICHAEL PATRICK

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 12/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,424

Applicant(s)

CONNOLLY, MICHAEL

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claims 1-29 are objected to because of the following informalities: In claim 1, line 19 the word "leveling" is misspelled and should be "leveling". Appropriate correction is required. It is the applicant's responsibility to check the reset of the claims for informalities.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 9 recites the limitation "the shaft two spring means" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 10-18, 20, 21, 24-26, 28, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Knittel ('192).

Claim 1

Knittel ('192) discloses a laser leveling apparatus including a body means (Fig. 1, Ref. 32), platform means (Fig. 1, Ref. 7) supported by the body means and selectively pivot able about a first axis (Col. 4, lines 19-39), drive means supported by the platform means and selectively pivot able about a second axis transverse to the first axis (Col. 3, lines 23-30), a head means (Fig. 1, Ref. 38) rotatably supported by the drive means and adapted to be selectively rotated by the drive means about a third axis transverse to the second axis (Col. 5, lines 13-25), laser means supported by the head means to selectively project laser radiation from the head means transverse the third axis, the laser means includes a semiconductor laser (Col. 2, lines 4-9) adapted to produce the laser radiation (See Fig. 1). It is the position of the examiner that since the claimed limitation fails to disclose how the laser is supported by the head means, therefore the configuration of Knittel ('192) shows the head and laser are supporting each other reading on applicants claimed limitation. Knittel ('192) further discloses rotatable electrical connection means so as to supply power to the laser (Col. 5, lines 48-57). It is the position of the examiner that the reference of Knittel ('192) has multiple connections since it is inherent that power is

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transported by a position and a negative cable therefore it is inherent to have multiple connections to the laser.

Claim 2

Knittel ('192) further discloses that the laser radiation projected by the laser is perpendicular to the third axis, the third is perpendicular to the second and the second is perpendicular to the first and having a drive means to align the axis (Col. 4-5, lines 45-2).

Claim 3

The reference of Knittel ('192) further discloses the body means has leveling means to enable adjustment of the support of the platform means for aligning the axis (Col. 4-5, lines 45-2).

Claim 4

Knittel ('192) further discloses that the drive means can be rotated and secured in a first and second configuration (Col. 4, lines 45-2).

Claim 10

Knittel ('192) further discloses the leveling means automated means to effect leveling of the platform (Col. 4, lines 63-68).

Claim 11

The reference of Knittel ('192) further discloses a stand for supporting the body means in an elevated position above a floor (Fig. 1, Ref. 42).

Claim 12

Knittel ('192) further discloses the body surface is rested upon a suitable relatively flat surface (See Fig. 1).

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Claim 13-18

The reference of Knittel ('192) further discloses a graduated circular scale, an indication mark, a electric motor, a control means etc... (Col. 4, lines 20-62).

Claim 20

Knittel ('192) further discloses the control means permits control of the stepper motor so as to rotate to a desired position about an axis (Col. 4, lines 19-40; Col. 5, lines 48-56).

Claim 21

Knittel ('192) further discloses the laser head having a means to collimate the laser to the third axis (Col. 5, lines 14-31).

Claim 24

The reference of Knittel ('192) further discloses that the drive means is supported by the platform means such that the laser head may be rotated in a first axis (See Fig. 1).

Claim 25

Knittel ('192) further discloses that the platform and body means have aperture means such that the first axis is unobstructed (See Fig. 1).

Claim 26

The reference of further discloses the drive means is supported by the platform means so as to be rotatable through 180 degrees relative to the platform means (Col. 3, lines 17-19).

Claim 28

Knittel ('192) further discloses a prism mountable in front of the laser adapted to spread the laser beam into a line (Col. 5, lines 14-16).

Claim 29

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Knittel ('192) discloses the prism is adapted to spread the laser beam into two intersecting orthogonal lines (See Fig. 1).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5,19,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel ('192).

Claim 5

Knittel ('192) discloses the claimed invention except for a drive means and a rotatable shaft. It would have been obvious matter of design choice to combine Knittel ('192) with the drive means and a rotatable shaft, since applicant has not disclosed that the drive means and a rotatable shaft solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the rotating and leveling disclosed in Knittel ('192).

Claim 19

Knittel ('192) discloses the claimed invention except for the control means is contained in the platform and connected to the stepper motor and laser means via electrical wiring. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Knittel ('192) with control means contained in the platform etc... since it is was well

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known in the art that providing the control means and other components within a platform reduces the size of the apparatus and makes it more compact.

Claim 22

Knittel ('192) discloses the claimed invention except for the support means etc.... It would have been obvious matter of design choice to combine Knittel ('192) with the support means, since applicant has not disclosed that the support means solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with support means disclosed in Knittel ('192).

10. Claims 6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel ('192) as applied to claim 5 above, and further in view of Marsh ('158).

Claim 6

Knittel ('192) substantially teaches the claimed invention except that it does not show a shaft having coaxial electrically conductive parts insulated one from the other etc.... Marsh ('158) shows that it is known to provide an a shaft having coaxial electrically conductive parts etc... (Fig. 3, Ref. 30, 78) for a rotating laser system. It would have been obvious to combine the device of Knittel ('192) with the coaxial electrically conductive parts of Marsh ('158) for the purpose of providing a path for electrical connection that prevents the wires from being snagged by other components.

Claim 7

Knittel ('192) in view of Marsh ('158) discloses the claimed invention except for first and second rotatable electrical connection means respectively electrical brush arrangements. It would

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have been obvious to one having ordinary skill in the art at the time the invention was made to combine Knittel ('192) in view of Marsh ('158) with the electrical brush arrangements, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

11. Claims 8,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel ('192) as applied to claim 3 above, and further in view of Ohtomo et al. ('613).

Claim 8,9

Knittel ('192) substantially teaches the claimed invention except that it does not show a two spirit bubbles etc.. Ohtomo et al. ('613) shows that it is known to provide a bubble leveling system (Fig. 1, Ref. 20, 21, 65, 66) for a laser leveling system. It would have been obvious to combine the device of Knittel ('192) with the bubble leveling of Ohtomo et al. ('613) for the purpose of providing visual indication of the position of the laser leveling system.

12. Claims 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel ('192) as applied to claim 3 above, and further in view of Ohtomo et al. ('613).

Claim 23

Knittel ('192) substantially teaches the claimed invention except that it does not show a remote control. Ohtomo et al. ('613) shows that it is known to provide a remote control (See Fig. 35) for a laser leveling system. It would have been obvious to combine the device of Knittel ('192) with the remote control of Ohtomo et al. ('613) for the purpose of providing remote

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access for a user to be able to control the apparatus from a distance, therefore allowing the apparatus to be placed into hazardous locations.

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel ('192) as applied to claim 1 above, and further in view of Ohtomo et al. ('613).

Claim 27

Knittel ('192) substantially teaches the claimed invention except that it does not show a sensor detector etc.... Ohtomo et al. ('613) shows that it is known to provide a sensor (Fig. 2, Ref. 116; See abstract) for a laser leveling apparatus. It would have been obvious to combine the device of Knittel ('192) with the laser sensor of Ohtomo et al. ('613) for the purpose of providing relative remote alignment to a target at different angles, therefore decreasing the time needed to align the apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 703-308-4837. The examiner can normally be reached on 4/10.

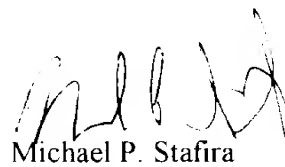
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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A handwritten signature in black ink, appearing to read 'Michael P. Stafira', is written over the printed name.

Michael P. Stafira
Primary Examiner
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December 4, 2002